CONTINUING ELIGIBILITY INSPECTION (CEI) REPORT
FOR FLOOD CONTROL PROJECTS

1. **Project Name:** Kawainui Marsh Flood Control Project

2. **Date of Inspection:** December 18, 2002

3. Inspection Personnel:

Name	Agency/Office	Telephone No.
a. Nani Shimabuku	CEPOH-EC-T	438-2940
b. Eric Li	CEPOH-EC-T	438-8862
c. Hugh Liu	DFM/Road Main Div.	527-5337
d. Mike Pundyke	DFM/Road Main Div.	262-4346
e. Chad Maio	DFM/Road Main Div.	262-4346

4. **Discussion:**

Conditions were clear and sunny with rising tide. Vegetation removal on the townside of the marsh levee is required in order to clearly inspect the base of the levee wall portion. The vegetation removal along the levee sideslopes at Oneawa Channel needs to continue. Many of the encroachments on Oneawa Channel's levees have been removed. However, work is needed to remove remaining encroachments. Maintenance work on some of the Oneawa levee headwall culverts is required. All the deficiencies were brought to the C&C's attention during the inspection. (® denotes a repeat item from last inspection.) **Refer to alphabetical lettered "photo plan" in back of report for picture reference.**

Table. Summary of Defects Requiring Maintenance

Location	Station	Defects
Levee Concrete Wall - marsh side	Varies	Remove and replace caulking at various joints as required.
Levee Concrete Wall - town side	Varies	Remove vegetation along rock wall - unable to inspect toe.
Levee Concrete Wall - marsh side	61+25	Backfill and cover exposed filter fabric at toe of levee.
Oneawa Channel RB	90+00	Trim tree branch encroachments
Oneawa Channel RB	89+00	Remove all unauthorized concrete blocks (typical). Move all boat encroachments away from channel slope (typical).
Oneawa Channel RB	88+00	Fill eroded area adjacent to toe of concrete culvert headwall.
Oneawa Channel RB	87+00	Remove overgrown vegetation and fill all eroded bank areas.
Oneawa Channel RB	86+50	Fill eroded area adjacent to toe of culvert.
Oneawa Channel RB	80+00	Fill eroded bank toe.
Oneawa Channel RB	61+50	Remove unauthorized steps.
Oneawa Channel RB	47+75	Patch damaged culvert; rebar exposed.
Oneawa Channel RB	30+00	Remove sediments in culvert headwall and trim encroaching tree branches.
Oneawa Channel RB	14+00	Monitor eroded toe bank. Currently rocks beneath the water adjacent the bank toe alleviates erosion in the area.
Oneawa Channel LB	19+20	Remove unauthorized steps.
Oneawa Channel LB	21+00	Remove unauthorized steps.
Oneawa Channel LB	35+00	Replace unauthorized removal of rocks at toe of bank outside Pinky's restaurant.
Oneawa Channel LB	40+50	Patch cracked culvert headwall
Oneawa Channel LB	45+50	Repair crack in culvert.
Oneawa Channel LB	52+80	Remove debris around culvert headwall and patch the cracked portion of the headwall.
Oneawa Channel LB	61+00	Patch concrete headwall.
Oneawa Channel LB	85+00	Fill eroded toe of culvert headwall.

LEVEE - NOTE: Sta. 0+00 Levee Rock Wall Begins

High-water transmitter Sta. 15+30, Marshside of levee

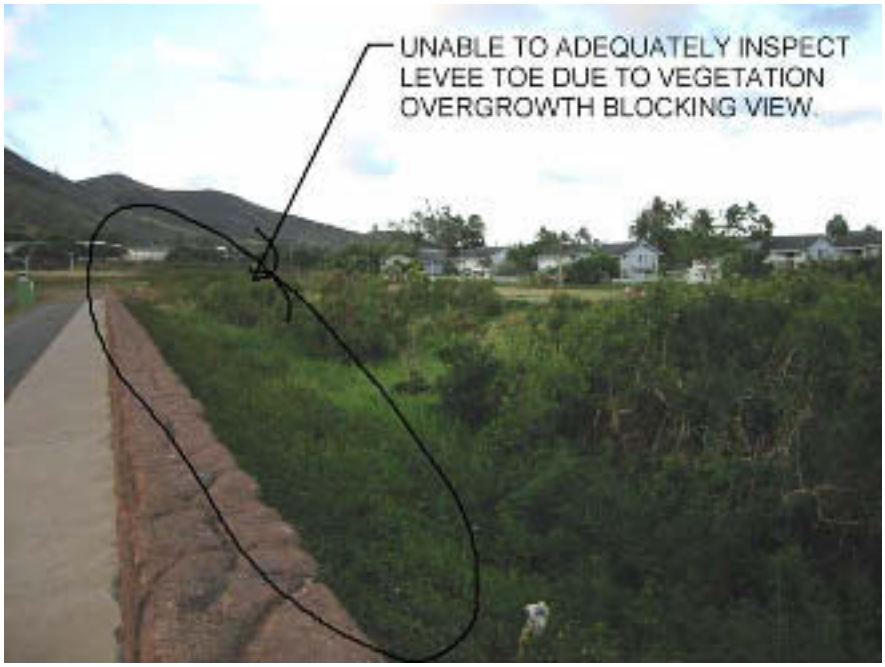
Sta. 64+04 wall ends

a. General comment ~ Remove and replace caulking at various joints as needed

®. Example taken from two separate joints at approximately station 62+50.

b. Sta. 63+00, TS (Town Side), overview of floodwall.

c. Sta. 64+00, Overview of floodwall.

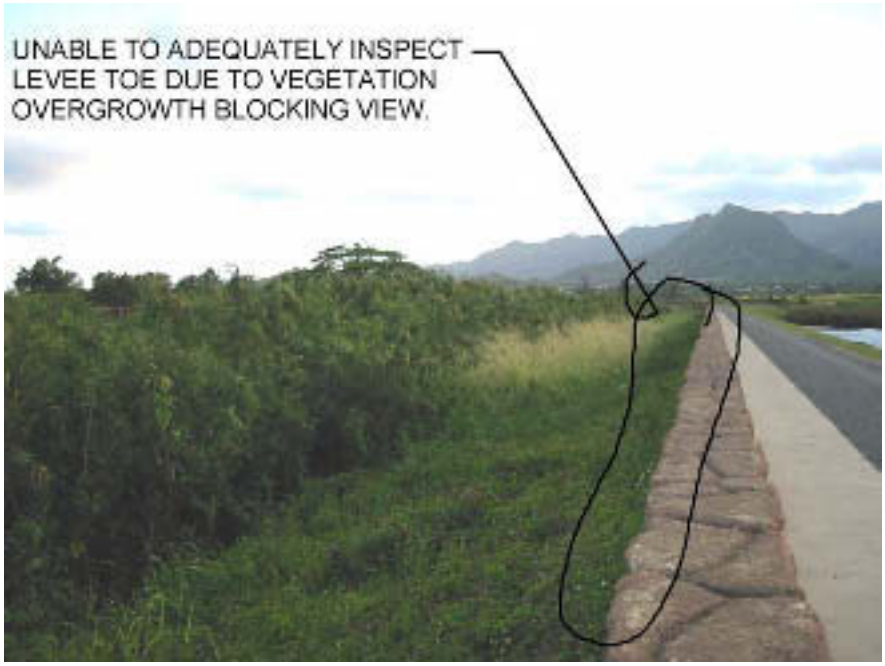


c2. Sta 63+05, Remove vegetation on townside along levee rock wall - unable to adequately inspect toe ®.

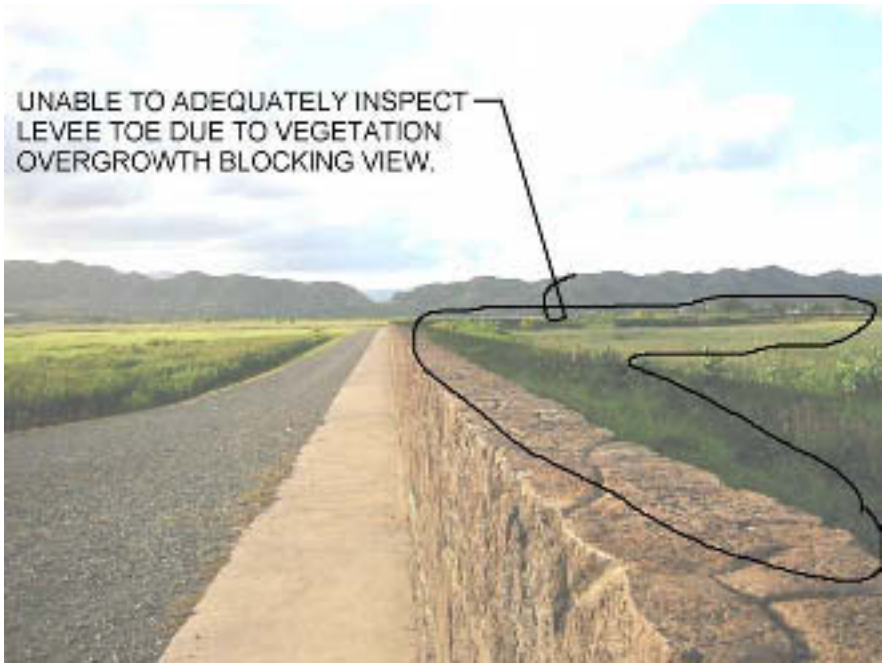
c3. Sta. 63+00, Overview.

c4. Sta. 62+00, Overview.

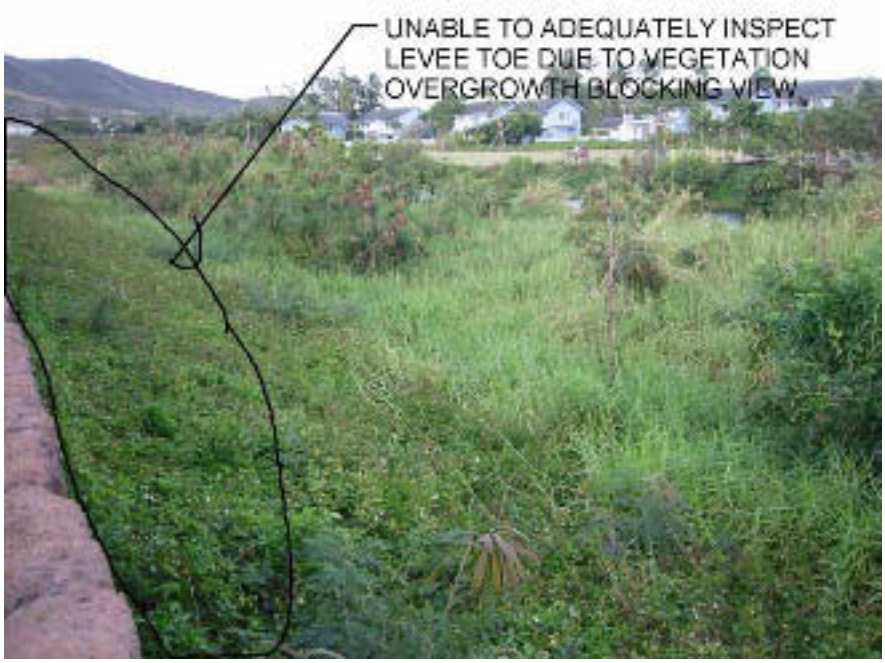
d. Sta. 61+25, MS (Marsh Side), backfill and cover exposed filter fabric at toe of levee.



d2. Sta. 60+00, Remove vegetation on townside along levee rock wall - unable to adequately inspect toe ®.



d3. Sta. 21+00, Remove vegetation on townside along levee rock wall - unable to adequately inspect toe ®.



d4. Sta. 20+00, Remove vegetation on townside along levee rock wall - unable to adequately inspect toe ®.

e. Sta. 18+00, MS, overview.

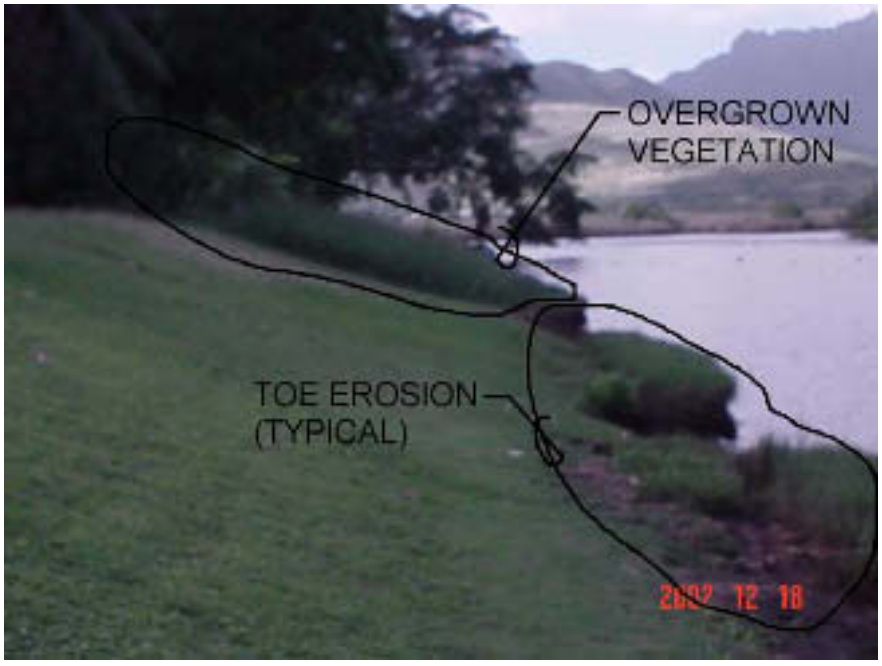
e2. Sta. 0+00, Overview.

ONEAWA CHANNEL RIGHT BANK, RB - NOTE: Stations are approximate. However, the order of the pictures is sequenced from right bank mauka (about sta. 90+00) end to mouth (sta. 2+00) and then from left bank at mouth (2+00) to mauka (towards sta. 90+00).

f. Sta. 90+00, RB, trim tree branch encroachments.

g. Sta. 89+00, RB, remove all unauthorized concrete blocks (typical). Move all boat encroachments away from channel slope (typical).

h. Sta. 88+00, RB, fill eroded area adjacent toe of culvert. Recommend riprap.



i. Sta. 87+00?, RB, remove overgrown vegetation and fill all eroded toe of banks.

j1. Sta. 86+50, RB, fill erosion adjacent eroded toe of culvert upstream Oneawa Bridge. Recommend rip-rap.

j2. Sta. 86+50, RB, enlargement of area; undermining.

k. Sta. 80+00, RB, fill in eroded bank toe. Recommend rip-rap.

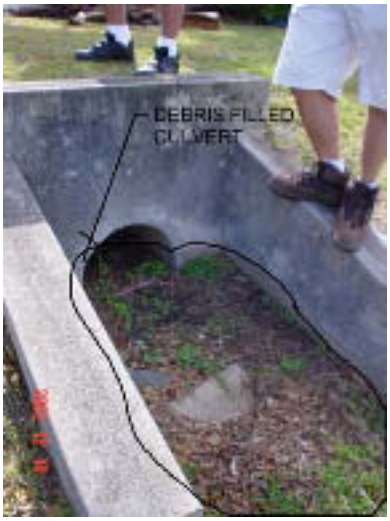
L1. Sta. 61+50, RB, remove unauthorized steps.

L2. Sta. 61+50, RB, enlargement.

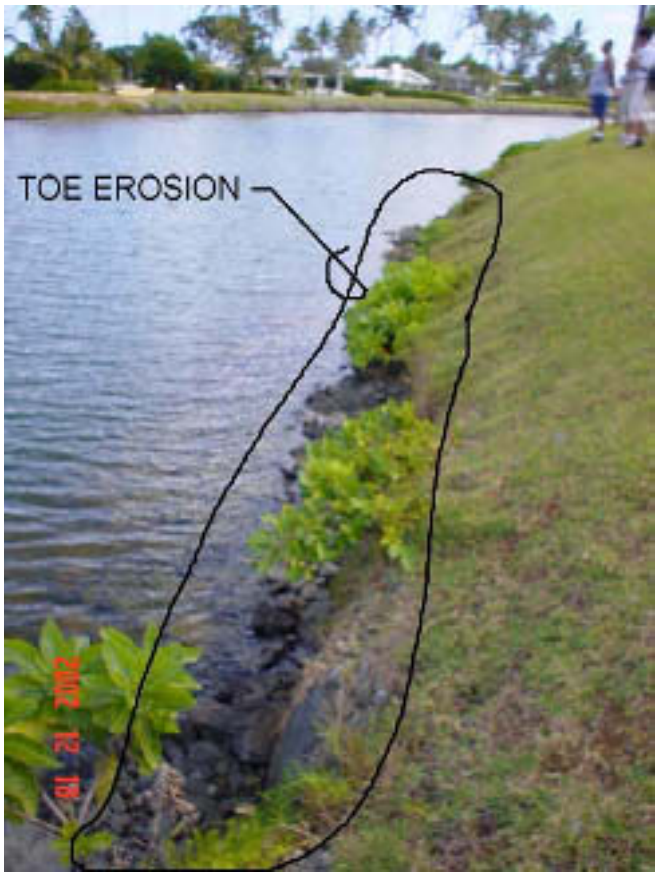
m1. Sta. 47+75, RB, patch damaged culvert; rebar exposed.

m2. Sta. 47+75, RB, enlargement.

n1. Sta. 30+00, RB, remove sediments in culvert headwall. Trim encroaching tree branches.



n2. Sta. 30+00, RB, culvert enlargement. Keep culvert clean of debris.

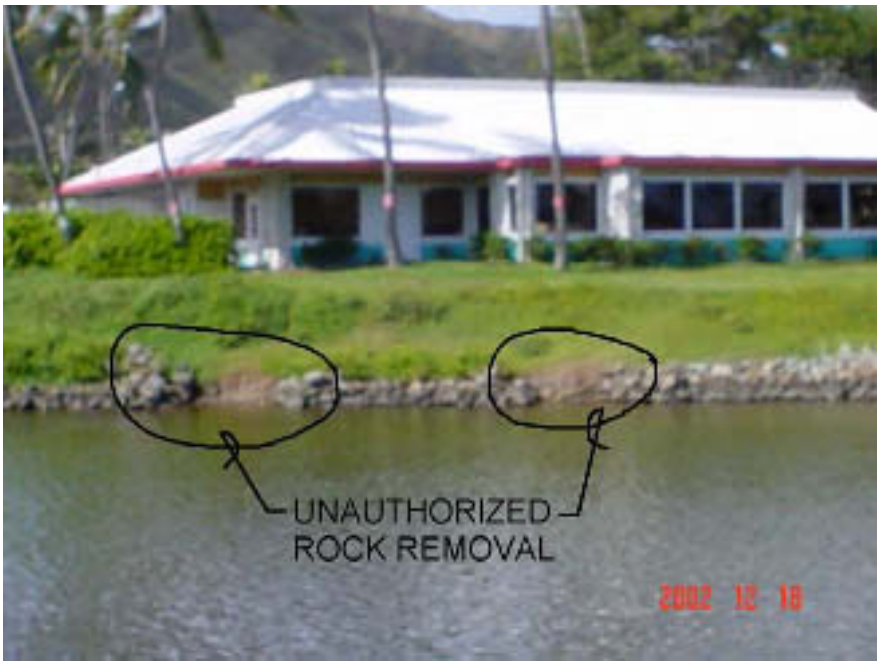


o. Sta. 14+00, RB, monitor eroded toe area within 1 Kailuana Place. Currently rocks beneath the water adjacent the bank toe alleviates erosion in this area.

ONEAWA CHANNEL LEFT BANK, LB

p1. Sta. 19+20, LB, remove unauthorized steps.

p2. Sta. 21+00, LB, remove unauthorized steps.



q. Sta. 35+00, LB, replace unauthorized removal of rocks at toe of bank outside Pinky's restaurant.

r. Sta. 40+50, LB, patch cracked culvert headwall.

s1. Sta. 45+50, LB, repair crack in culvert.

s2. Sta. 45+50, LB, enlargement.

t1. Sta. 52+80, LB, removed debris around culvert headwall.

t2. Sta. 52+80, LB patch cracked culvert headwall.

u. Sta. 61+00, LB, patch cracked concrete headwall.

v. Sta. 85+50, LB, fill erosion at toe of culvert headwall. Recommend use of larger rip-rap.

5. Conclusion:

IAW ER 500-1-1, (dated 30 September 2001), and based on this CEI, the Project Condition Code is ACCEPTABLE and the project is considered ACTIVE in the Rehabilitation and Inspection Program.

Signed: _____
Eric Li, CEPOH-EC-T

Signed: _____
Nani Shimabuku, P.E., CEPOH-EC-T

Signed: _____
Jim Pennaz, P.E., Ch, CEPOH-EC-T

Enclosure(s)
1. Site Plan
2. Photo Map
3. Fact Sheet